Submitted to:

United States Department of the Interior Bureau of Land Management Elko District Office 3900 East Idaho Street Elko, Nevada 89801

The
Genesis Project
Plan of Operations
REVISED

An Amendment to the Genesis-Bluestar Plan of Operations

Propured by:

Newmont USA Limited purchased Mining Corporation P.O. Box 669
Carlin, Nevada 89822

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LIST OF ACRONYMS & ABBREVIATIONS

Newmont Mining Corporation Newmont Genesis-Bluestar Operations Area **GBOA** Bureau of Land Management **BLM**

Nevada Division of Environmental Protection **NDEP**

National Environmental Policy Act **NEPA**

Plan of Operations PoO

Waste Rock Disposal Facility **WRDF** Potential Acid Generating **PAG**

EXECUTIVE SUMMARY

The Genesis Project is an amendment to the Newmont Mining Corporation's (Newmont) Genesis-Bluestar Operations Area (GBOA) N16-88-007P. This plan amendment has been prepared by Newmont in compliance with the United States Bureau of Land Management (BLM) regulations (43 C.F.R. Subpart 3809) and Nevada Division of Environmental Protection (NDEP) regulations governing the reclamation of mined lands (NAC 519A.010-635). The Genesis Project, referred to hereafter as the Project, will occur in Eureka County, Nevada on both public lands administered by the Elko Field Office of the BLM and private land owned by Newmont. The purpose of this proposal is to extend the mine life within the GBOA by mining additional ore from existing and additional open pits within this plan boundary.

Surface impacts of mining on public lands are subject to the BLM regulations defined in 43 C.F.R. Subpart 3809. The 3809 regulations do not apply to the private lands in this proposal (43 C.F.R. 3809.2(d)). Those regulations also state, however, that "for the purposes of analysis under the National Environmental Policy Act (NEPA) of 1969, BLM may collect information about private land that is near to, or may be affected by, operations under the regulations, 43 C.F.R. 3809.2(d). For purposes of regulatory authority, this plan distinguished between public and private lands that will be disturbed by proposed activities, but acknowledges that, for NEPA purposes, BLM's review is likely to look beyond the proposed activities on public lands. The proposed plan complies with both BLM and NDEP regulatory requirements.

Nevada Division of Environmental Protection regulations govern the reclamation of mined lands. The proposed reclamation activities occur solely within the GBOA and will be administered under Reclamation Permit No. 0096.

As required by NEPA, environmental analyses were prepared early in the development of surface mining in the GBOA in Environmental Assessment for the Newmont Gold Company's Blue Star Operations Area, Eureka County, Nevada (BLM 1989), Environmental Assessment BLM/EK/PL-95/003 Newmont: Section 36 Project (BLM 1995), and Environmental Assessment BLM/EK/PL-96/016 Newmont: Lantern Mine Expansion Project (BLM 1996). The effect of dewatering in the GBOA was analyzed in Cumulative Impact Analysis of Dewatering and Water Management Operations for the Betze Project, South Operations Area Project Amendment, and Leeville Project (BLM 2000) and Final Environmental Impact Statement Leeville Project (BLM 2002).

This Plan of Operations Amendment for the Genesis Project includes descriptions of the following proposed activities:

- An expansion of the existing Genesis open pit mine;
- The development of the West Genesis Phase I open pit mine;
- The development of the West Genesis Phase II open pit mine;

- The development of the Bluestar Ridge open pit mine and the construction of an associated haul and access road;
- The in-pit backfill of the Beast open pit mine with PAG and Non-PAG waste rock;
- The in-pit backfill of the Bluestar open pit mine with Non-PAG waste rock;
- The in-pit backfill of the Genesis open pit mine with PAG and Non-PAG waste rock:
- The in-pit backfill of the West Genesis Phase I open pit mine with PAG and Non-PAG waste rock;
- The vertical expansion of the Section 36 Waste Rock Disposal Facility (WRDF) and the construction of an associated haul and access road; and
- The vertical expansion of the Section 5 Waste Rock Disposal Facility.

Total existing and incremental disturbance for the Genesis Project is 1,849 acres, and consists of existing disturbance plus 26 acres of incremental open pit disturbance, 9 acres of incremental Waste Rock Disposal Facility disturbance, and 8 acres of incremental haul and access road disturbance. This plan includes methods and costs for reclamation of all existing and planned disturbance. The estimated reclamation cost for the existing and planned disturbance at the Genesis Project is approximately \$9.6 million.

1.0 PROJECT OVERVIEW

1.1 APPLICANT INFORMATION

Newmont is the owner and operator of the proposed operation described in this Plan of Operations Amendment. Newmont focuses on ore mining, recovery, and marketing of gold from its reserve holdings.

1.1.1 Claims Information

A list of all mining claims on public land is included in Appendix 3. Included in this list is the claim name, claim type (Lode, Mill site, etc.) and Nevada Mining Claim (NMC) serial number. All claims are owned by or under lease to Newmont. Newmont is the operator of the Genesis Project Mines.

1.1.2 Individual Completing Application

Roger MacGregor Environmental Permitting

1.1.3 Business Address

Newmont Mining Corporation P.O. Box 669 Carlin, Nevada 89822

1.1.4 Business Telephone

Telephone (775) 778-2148 FAX (775) 778-4756

1.1.5 Corporation Information

Name: Newmont USA Limited dba Newmont Mining Corporation

Federal Tax Identification #: 13-2526632

Chairman and CEO:

Richard T. O'Brien 1700 Lincoln Street Denver, Colorado 80203 (303) 863-7414

Treasurer:

Thomas P. Mahoney 1700 Lincoln Street Denver, Colorado 80203 (303) 863-7414

Secretary:

Sharon E. Thomas 1700 Lincoln Street Denver, Colorado 80203 (303) 863-7414

Nevada Registered Agent:

CT Corporation 6100 Neil Road, Suite 500 Reno, Nevada 89511 (775)688-3061

1.1.6 Partnership Information

Not applicable.

1.2 PROJECT AREA AND OWNERSHIP

1.2.1 Project Location

The Genesis Project is within the Genesis-Bluestar Operations Area (GBOA), which is owned and operated by Newmont Mining Corporation. The GBOA is located approximately 3 miles northwest of the Carlin mine, which is also owned and operated by Newmont Mining Corporation, and approximately 1 mile south of the Betze-Post mine, which is owned and operated by Barrick Gold Corporation. These mines are located approximately 30 miles north of Carlin, in Eureka County, Nevada (Figure 1).

1.2.2 Project Access

Newmont's existing gold mining operations and the proposed Project are located in Eureka County, Nevada and can be reached from Elko, Nevada by traveling west on Interstate 80 to Exit 280 at Carlin, then traveling north 11 miles on State 766, and then northwest eight miles on a paved county road.

1.2.3 Land Ownership

The area of the Genesis Project is within the GBOA, just north of the Carlin Plan of Operations, and just west of the Leeville Plan of Operations (**Figure 2**). The Project is surrounded by active mines belonging to Newmont Mining Corporation and Barrick Gold Corporation. The surface mining in the Genesis Project occurs on 534 acres of public land and 1,315 acres of private property.

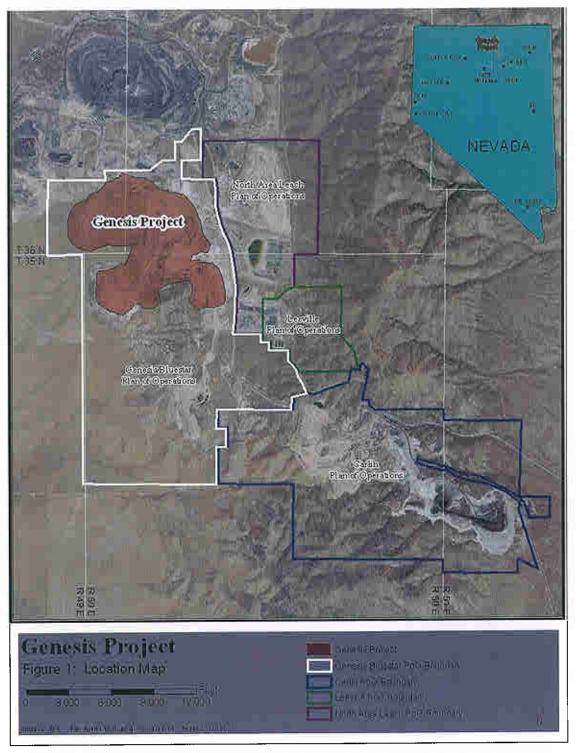


Figure 1: Genesis Project Location Map

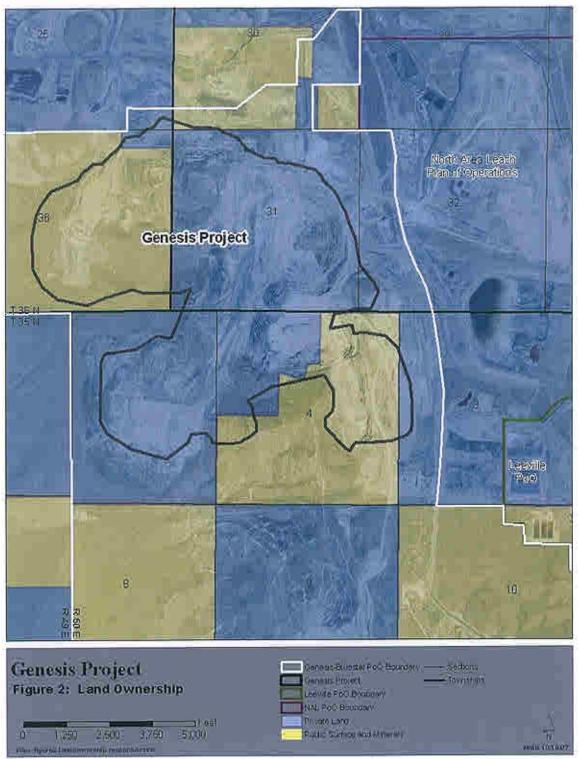


Figure 2: Genesis Project Land Ownership

2.0 EXISTING AND PROPOSED OPERATIONS

Existing activities in and near the Genesis Project include open pit mining, underground mining, tailings storage, mineral exploration, leach operations with associated support facilities and ancillary mining facilities. Existing disturbance in and near the Project area is shown in **Figure 3**.

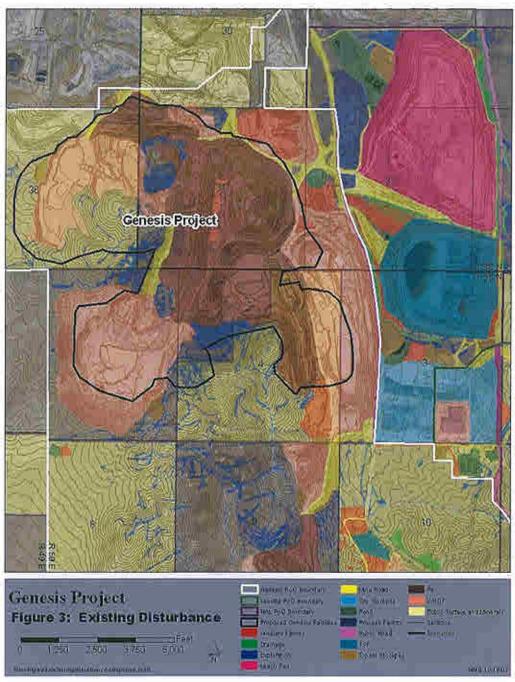


Figure 3: Genesis Project Existing Disturbance

2.1 HISTORICAL BACKGROUND

Within the GBOA, the presence of gold was first recognized on the property in 1959 by M.M. and S. Exploration. A 100-ton cyanide mill was built, but operated only briefly due to metallurgical problems. Newmont acquired the property and mineral rights under lease agreement with the T Lazy S Ranch in 1966 and began developmental drilling. From 1971 to 1974, the Bluestar Mine was developed, and the milling of ore from the mine commenced in 1975.

In 1989 the first Environmental Assessment was conducted on the Genesis Project Area. The Environmental Assessment for the Newmont Gold Company's Blue Star Operations Area, Eureka County, Nevada (BLM 1989) grants Newmont approval to continue exploration and drilling throughout the GBOA, continue mining in the existing Genesis and Bluestar mines, expand the Section 5 WRDF, and construct the North WRDF. The Environmental Assessment BLM/EK/PL-95/003 Newmont: Section 36 Project (BLM 1995) grants Newmont approval to construct the Section 36 WRDF, expand the Section 5 WRDF vertically, develop and operate five open pit mines (Payraise, Sold, Beast, North Star, and Bobcat), and continue exploration activities. The Environmental Assessment BLM/EK/PL-96/016 Newmont: Lantern Mine Expansion Project (BLM 1996) grants Newmont approval to expand the Lantern open pit mine, expand the Lantern North WRDF, construct the Lantern South WRDF, develop ancillary facilities, and expand the North Area Leach Facility. The Determination of NEPA Adequacy for the North Lantern Plan of Operations Amendment grants Newmont approval to construct the North Lantern open-pit, the Lantern East WRDF, associated haul roads, reroute the Sheep Creek drainage access route, and continue exploration throughout the GBOA (BLM 2007).

2.2 PHYSICAL SETTING

2.2.1 Geology

The gold deposits at the Genesis Project are exposed in the Lynn window, a tectonic window through the Roberts Mountains Thrust. Autochthonous or "lower plate" rocks are exposed by a combination of folding and high-angle faulting. The Genesis deposit is located within the hinge zone of the Tuscarora anticline, while the Bluestar and Bobcat deposits occur in the west, and Beast/Sold on the east limb of the same anticline. The Tuscarora anticline is NNW-trending, 20 to 30-degree N-plunging, upright fold. The northern portion of the Genesis deposit is intruded by the northeast trending, 160 Ma. This is a thick, composite diorite-granodiorite sill complex. Goldstrike intrusion. Numerous dikes and sills are emplaced along bedding planes, low-angle faults, and highangle faults. Contact metamorphism and metasomatism reduced host rock permeability up to 2,500 feet south from the intrusive contact, forming calc-silicate hornfels, marble, exoskarn (carbonate protoliths), and quartz hornfels (siliciclastic protolith). A quartzbiotite monzonite dike was intruded at 37 Ma south of the Genesis pit. Mineralization at Beast is partially controlled by this 37 Ma north-trending, east-dipping dike. Contact metamorphism has also largely de-activated the carbon, rendering it inert when exposed to cyanide solutions.

Stratigraphy consists of autochthonous Siluro-Devonian Roberts Mountains Formation, Devonian Popovich Formation, and the Devonian Rodeo Creek unit. Lithology varies from carbonates lower in the section to increasingly siliciclastic rocks higher in the section. The autochthonous sequence is structurally overlain, along the Roberts Mountains Thrust, by an allochthonous package of penetratively sheared mudstone and quartz hornfels of the Ordovician Vinini Formation.

The oldest structural event is the early Devonian Roberts Mountains Thrust, formed during the early Devonian Antler Orogeny. Features formed during the late Jurassic include synchronous NNW-trending folding and emplacement of the Goldstrike intrusive complex with contact metamorphism and metasomatism. The late Cretaceous Sevier Orogeny produced the NNW structural fabric that dominates the area. Gold mineralization and emplacement of the NNE-striking K-Dike occurred about 40 Ma. The last major structural event was reactivation of the NNW-striking, steeply east-dipping Gen fault, a major normal fault zone with 800-1,200 feet of offset. Minor reactivation occurred during the Pliocene along on most high-angle faults, as demonstrated by only minor offset of Tertiary Carlin Formation relative to major offset of the Paleozoic Formations.

Dominant alteration associated with mineralization, within the carbonates, is decalcification with accompanying minor silicification, clay alteration, and quartz-sericite-pyrite alteration. Sulfide deposition accompanied these alteration events. Where oxidized, oxide products of the sulfides are abundant.

2.2.2 Hydrology

Hydrology of the Genesis Project area is thoroughly covered in the "Leeville Project Environmental Impact Statement," and in "Cumulative Impact Analysis of Dewatering and Water Management Operations for the Betze Project, South Operations Area Project Amendment, and Leeville Project." Therefore, only a brief review is given below.

2.2.2.1 Surface Water

The Genesis Project is located along the crest and eastern flank of the Tuscarora Spur, within the Boulder Flat hydrographic area (No. 61). Boulder Creek, the primary surface water drainage in this hydrographic area, generally drains southwest toward Rock Creek and the Humboldt River, located approximately 15 miles from the Project site. Bell, Brush, Sheep, and Rodeo creeks are intermittent, third and fourth-order drainages; only Boulder Creek, a second-order drainage, may occasionally flow to the Humboldt River. There are no natural ponds or lakes in the vicinity of the Genesis Project.

The Tuscarora Spur forms the boundary between Little Boulder Basin on the east and Boulder Valley on the west. Tuscarora Spur also forms the divide between the two main drainages near the Project, Rodeo Creek and Sheep Creek, both of which have their headwaters in the Tuscarora Mountains east of the Project. Rodeo Creek drains northward from Little Boulder Basin to its confluence with Boulder Creek approximately four miles northwest of the Genesis Pit. Sheep Creek drains southwest from Little

Boulder Basin to Boulder Valley, where this ephemeral stream terminates on an alluvial fan approximately six miles southwest of the Genesis Pit.

All streams in the Genesis-Bluestar Plan of operations area are ephemeral or intermittent, the former with flow occurring primarily in response to significant precipitation events or snow-melt runoff, and the latter flowing mainly in wetter months when the water table is higher and in contact with the stream channel. Peak flow typically occurs during March, April, May, or June. Most reaches with perennial flow are located in the upper headwater mountainous areas. Where flow does occur in area streams, baseflow rates are in the range of 1 to 3 cubic feet per second (cfs) or less.

Rodeo Creek

In general, Rodeo Creek is dry except during the spring period of March through June. Intermittent flow in Rodeo Creek occurs primarily in the middle section of the stream as a result of groundwater discharge from springs and seeps. The Rodeo Creek channel typically is narrow and entrenched to depths of 4 to 24 feet.

Sheep Creek

Sheep Creek is an intermittent drainage that extends southwest toward Boulder Creek. No flow data are available for Sheep Creek. When flow occurs in the Sheep Creek channel from significant precipitation events, water normally infiltrates prior to reaching Boulder Creek.

Springs and Seeps

Numerous springs and seeps have been identified in Newmont's mining operations on the Carlin trend, primarily north of the Leeville mine on the flanks of the Tuscarora Mountains. On the west side of this mountain range, springs typically form the headwaters of Rodeo, Brush, Bell, and Boulder creeks. Most of the springs are small and often flow only part of each year at rates up to 5 gpm. The source for many of these mountain springs, especially above an elevation of about 6,000 feet, is believed to be primarily perched groundwater not connected to the regional water table. Locations of these springs generally are controlled by topography and/or geologic formation. None of these springs and seeps are located within the Genesis-Bluestar plan of operations area.

2.2.2.2 Groundwater

Groundwater in the Genesis Project moves through siltstone and carbonate rocks along the Tuscarora Mountains and then into basin fill deposits and volcanic rocks in Boulder, Rock, and Willow Creek valleys (west side) and Maggie Creek Valley (on the east side). In some areas, the siltstone and carbonate rocks are confined by overlying, older basin fill deposits. Carbonate rocks are unconfined where exposed at land surface. In general, carbonate rocks are the most permeable material in the area. Shallow alluvial deposits of interbedded sand and gravel are found in drainage bottoms at thicknesses of up to 50 feet.

Groundwater movement generally is down the valleys; however, mine dewatering and discharge in the Carlin Trend has influenced direction of flow in some areas.

Groundwater in the Genesis Project has been declining at a relatively constant rate since large-scale dewatering began at the Goldstrike property, and Leeville and Gold Quarry mines. Water level monitoring of the Upper Well in Sheep Creek, about 3.5 miles southeast of Genesis Pit (NW ¼ NW ¼ section 22, T35N R50E), began in November 1966. Based on data from the Upper Well, lower plate pre-dewatering water level in the Genesis area was about 5,267 feet AMSL. Water levels in lower plate rocks have dropped more than 700 feet in the same period, and are currently estimated at about 4,550 feet AMSL. This estimate is based upon a second order polynomial projection of drawdown, as measured in monitor well GEN-39, which was situated on the southwest side of Genesis pit. The projection is necessary because GEN-39 went dry in January 2002, and no other lower plate monitor wells have been constructed at Genesis since then.

Early hydrologic studies and current monitoring data indicate that water levels have declined about 100 feet in upper plate rocks over the period 1988 to 2007 at the Genesis Project. Pre-dewatering water levels in the upper plate at Genesis generally ranged from 5,600 to 5,400 feet AMSL.

This large disparity in dewatering between the upper and lower plate rocks in the Genesis Project, and even within upper plate rocks, is primarily due to structural compartmentalization. At the minesite scale compartmentalization is primarily attributable to the north-northwest trending Gen Fault (**Figure 9**). On a regional scale, thrust faults and the relatively low transmissivities exhibited by upper plate rocks, which have been hydrothermally altered and therefore contain appreciable clay, also contribute to the compartmental nature of groundwater.

2.3 PROJECT SUMMARY

The Genesis Project will mine 60 million tons of ore, while removing 455 million tons of waste rock over a 12 year Project life. With this plan amendment, Newmont proposes the following actions (**Figure 4**):

- An expansion of the existing Genesis open pit mine;
- The development of the West Genesis Phase I open pit mine;
- The development of the West Genesis Phase II open pit mine;
- The development of the Bluestar Ridge open pit mine and the construction of an associated haul and access road;
- The in-pit backfill of the Beast open pit mine with PAG and Non-PAG waste rock;
- The in-pit backfill of the Bluestar open pit mine with Non-PAG waste rock;

- The in-pit backfill of the Genesis open pit mine with PAG and Non-PAG waste rock;
- The in-pit backfill of the West Genesis Phase I open pit mine with PAG and Non-PAG waste rock;
- The vertical expansion of the Section 36 Waste Rock Disposal Facility (WRDF) and the construction of an associated haul and access road; and
- The vertical expansion of the Section 5 Waste Rock Disposal Facility.

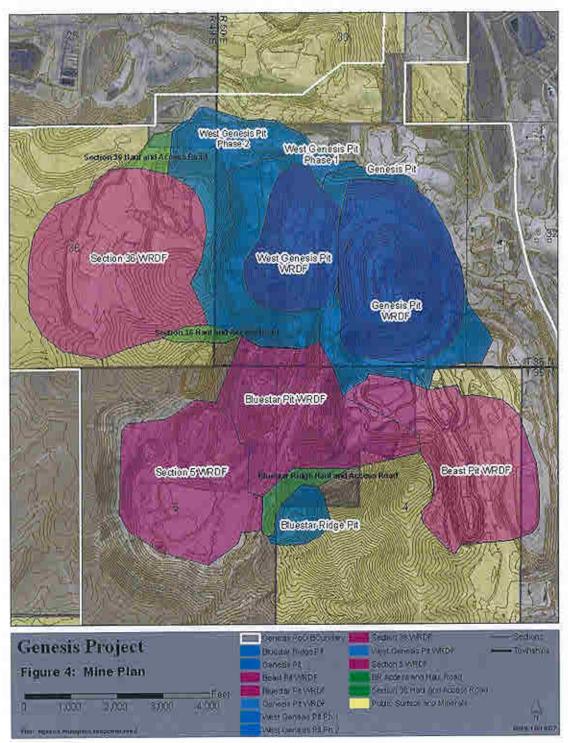


Figure 4: Genesis Project Mine Plan

Table 1 presents a summary of surface disturbance associated with the proposed amendment. Most of the land under the proposed facilities has been previously permitted (**Figure 5**).

Table 1: Genesis Acreage Table

		Permitted	Incremental	Per	Permitted	Incr	Incremental
Facility	Total Acres	Disturbance	Disturbance	Dist	Disturbance	Dist	Disturbance
		Total	Total	Public	Private	Public	Private
Bluestar Ridge Pit	28	2	26	1	1	19	7
Genesis Pit	283	283	0	4	279	0	0
West Genesis Phase I	226	226	0	6	217	0	0
West Genesis Phase II	96	96	0	34	62	0	0
				!			
Beast Pit WRDF	196	195	1	154	41	Ţ	0
Bluestar Pit WRDF	187	179	8	4	175	4	4
Genesis Pit WRDF	207	207	0	0	207	0	0
Section 36 WRDF	287	287	0	287	0	0	0
Section 5 WRDF	187	187	0	0	187	0	0
W Gen Pit WRDF	111	111	0	0	111	0	0
Bluestar Ridge Access and	-	-	•		10	c	œ
Haul Koad	13	11	0	-[IO		0
Section 36 Haul and Access	ζ.	22	_	7	v	_	c
Koad	77	777				<u> </u>	
TOTAL	1849	1806	43	510	1296	24	19

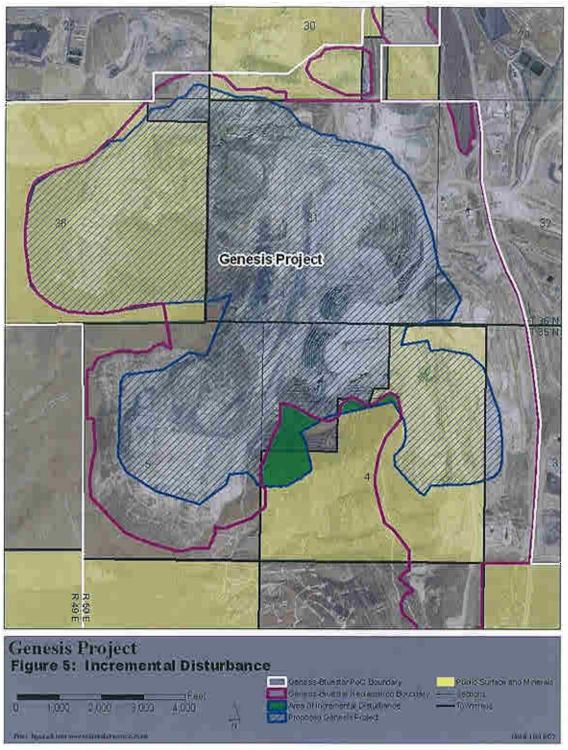


Figure 5: Genesis Project Incremental Disturbance

2.4 PROJECT SCHEDULE

The proposed development and operations schedule for the Genesis Project follows a 12 year Project life (**Table 2**). The majority of the tons come from the two largest pits, Genesis and West Genesis. A smaller satellite pit (Bluestar Ridge) is included in the Project and is scheduled for years 11 and 12 in the following table but, in reality it will be mined periodically throughout the Project life in order to facilitate Project flexibility. Mining in West Genesis Phases I & II will likely extend into years 11 and 12.

Table 2: Genesis Project Schedule

Year	Pit				
1	Genesis				
2	Genesis				
3	Genesis				
4	Genesis/ West Genesis Phase I				
5	Genesis/ West Genesis Phase I				
6	West Genesis Phase I				
7	West Genesis Phase I				
8	West Genesis Phase I				
9	West Genesis Phase I / West Genesis Phase II				
10	West Genesis Phase II				
11	Bluestar Ridge				
12	Bluestar Ridge				

2.5 OPEN PIT MINING

Newmont proposes to remove ore and waste rock from three new and one existing open pit mine in the Genesis Project:

- Genesis open pit mine (existing);
- West Genesis Phase I open pit mine (new);
- West Genesis Phase II open pit mine (new); and
- Bluestar Ridge open pit mine (new).

Oxide leach ore from the Genesis Project will be processed at the North Area Leach oxide heap leach facility located approximately 1 mile east of the Genesis pit. Low grade oxide leach ores will be delivered to the leach pad as run-of-mine material, while higher grade oxide leach ore may be crushed at the North Area Leach crusher prior to placement on the leach pad. Oxide and refractory mill ore will be processed at Mills 5 and 6 in Newmont's South Area operations, 6 miles north of Carlin, Nevada. Some of these ores may be temporarily stockpiled at Newmont's Section 3 stockpile area prior to processing.

2.5.1 Genesis Open Pit Mine (Genesis)

Genesis will be on both private and public land (Figure 4) with approximately 279 acres on private land and four acres on public. The construction and operation of the Genesis

Pit requires no incremental acreage disturbance (Figure 5). Mining of the Genesis Pit will occur during years one through five of the Project's twelve year mining schedule (Table 2). Newmont will use conventional open pit mining methods (truck and shovel), similar to those used in other pits.

The original Genesis/Bluestar open pit mine ceased operations in 2001. The lowest elevation achieved during that time was the 4,980 feet AMSL. The pit dimensions were approximately 5,900 feet long and 3,200 feet wide.

The proposed activity at the Genesis pit will expand the current pit 400 feet to the north, to an overall length of 6,300 feet. The width will expand 1,200 feet to a maximum width of approximately 4,400 feet. The lowest elevation of the Genesis Pit will be 4,620 feet AMSL, or an increase in depth of 360 feet.

Pre-dewatering groundwater elevation west of the Gen Fault at the Genesis Pit was approximately 5,267 feet AMSL; east of the Gen Fault it ranged between about 5,400 and 5,600 feet AMSL. At present, the water level west of the Gen Fault is approximately 4,550 feet AMSL, while east of the fault it is essentially the same as pre-dewatering.

The Genesis Pit contains 160.6 million tons of material, with approximately 14.9 million tons of ore, and 145.7 million tons of waste. The mining production schedule summary is shown in **Table 3**.

Table 3: Genesis Pit - Mineable Resource Development Schedule

Period (Years)	Oxide Leach Ore (Tons)	Oxide Mill Ore (Tons)	Refractory Mill Ore (Tons)	Total Waste Rock (Tons)	PAG Waste Rock (Tons)	% PAG of Total Waste
Year 1	300,000	-	-	19,700,000	-	-
Year 2	1,600,000	-	-	38,400,000	200,000	1%
Year 3	2,500,000	100,000	100,000	37,300,000	700,000	2%
Year 4	4,400,000	600,000	1,300,000	43,700,000	2,900,000	7%
Year 5	1,600,000	800,000	1,600,000	6,600,000	1,600,000	24%
Total	10,400,000	1,500,000	3,000,000	145,700,000	5,400,000	4%

Waste rock from the Genesis Pit will be both potentially acid generating (PAG) and non-acid generating (non-PAG). Non-PAG waste from the Genesis Pit will be placed in the proposed Beast Pit WRDF, the proposed Bluestar Pit WRDF, and the existing Section 5 WRDF. PAG waste from the Genesis Pit will be placed in the proposed Beast Pit WRDF and the existing Section 5 WRDF.

No new haul roads will need to be developed for mining of the Genesis Pit.

2.5.2 West Genesis Phase I Open Pit Mine (West Genesis Phase I)

West Genesis Phase I will be on both private and public land (Figure 4) with approximately 217 acres on private land and 9 acres on public land. The construction and

operation of the West Genesis Phase I Pit requires no incremental acreage disturbance (Figure 5). Mining of the West Genesis Phase I Pit will occur during years four through nine of the Project's twelve year mining schedule (Table 2). Newmont will use conventional open pit mining methods (truck and shovel), similar to those used in other pits.

The West Genesis Phase I pit will encompass the current Bobcat pit. The Bobcat pit is approximately 2,500 feet long and 1,300 feet wide. Operations in Bobcat achieved a depth of 5,480 feet AMSL.

The proposed mining action would increase the length by 1,900 feet to an overall length of 4,400 feet. The width would increase 1,300 feet for a maximum width of 2,800 feet. The lowest elevation of the West Genesis Phase I Pit will be 4,800 feet AMSL, an increase in depth of 680 feet.

The pre-dewatering groundwater table elevation at West Genesis Phase I is 5,267 feet AMSL.

The West Genesis Phase I Pit contains 255.6 million tons of ore and waste rock. The mining production schedule summary is shown in **Table 4**.

Waste rock from West Genesis Phase I will be both potentially acid generating (PAG) and non-acid generating (non-PAG). Approximately 10% of the 226.3 million tons of waste or 22.2 million tons of waste is expected to be PAG material. Non-PAG waste rock from the West Genesis Phase I Pit will be placed in the proposed Bluestar Pit WRDF, the existing Section 36 WRDF, the existing Section 5 WRDF, and the proposed Genesis Pit WRDF. PAG waste rock from the West Genesis Phase I Pit will be placed in the existing Section 36 WRDF, the existing Section 5 WRDF, and the proposed Genesis Pit WRDF.

No new haul roads will need to be developed for mining of the West Genesis Phase I Pit.

Table 4: West Genesis Phase I Pit Mineable Resource Development Schedule

D 1	Oxide Leach	Oxide Mill	Refractory	Total Waste	PAG Waste	% PAG of
Period	Ore	Ore	Mill Ore	Rock	Rock	Total Waste
(Years)	(Tons)	(Tons)	(Tons)	(Tons)	(Tons)	
Year 5	300,000	-	-	5,600,000	400,000	7%
Year 6	2,600,000	100,000	100,000	46,600,000	1,900,000	4%
Year 7	6,400,000	300,000	100,000	53,200,000	4,200,000	8%
Year 8	8,900,000	500,000	300,000	50,300,000	5,900,000	12%
Year 9	4,600,000	1,200,000	900,000	53,200,000	7,600,000	14%
Year 10	400,000	900,000	1,700,000	17,400,000	2,200,000	13%
Total	23,200,000	3,000,000	3,100,000	226,300,000	22,200,000	10%

2.5.3 West Genesis Phase II Open Pit Mine (West Genesis Phase II)

West Genesis Phase II will be on both private and public land (**Figure 4**) with approximately 62 acres on private land and 34 acres on public land. The construction and operation of the West Genesis Phase II Pit requires no incremental acreage disturbance (**Figure 5**). Mining of the West Genesis Phase II Pit will occur during years nine through ten of the Project's twelve year mining schedule (**Table 5**). Newmont will use conventional open pit mining methods (truck and shovel), similar to those used in other pits.

The West Genesis Phase II mine encompasses the North Star open pit mine which concluded operations in 1998. The mine is approximately 2,600 feet long and 1,300 feet wide. An overall depth down to the 5,360 feet AMSL elevation was achieved.

The proposed mining activity will increase the length of the pit by 500 feet to a maximum length of approximately 3,100 feet. The width of the pit will increase by 1,400 feet to a width of 2,700 feet. Overall depth will only be increased 80 feet to an elevation of 5,280 feet AMSL. All of the West Genesis Phase II mine is above the pre-dewatering groundwater elevation of 5,267 feet AMSL, and will not require any dewatering.

The West Genesis Phase II Pit contains 11.4 million tons of ore and 68.5 million tons of waste rock. The mining production schedule summary is shown in **Table 5**.

Table 5: West Genesis Phase II Pit Mineable Resource Development Schedule

Period (Years)	Oxide Leach Ore (Tons)	Oxide Mill Ore (Tons)	Refractory Mill Ore (Tons)	Total Waste Rock (Tons)	PAG Waste Rock (Tons)	% PAG of Total Waste
Year 9	3,100,000	100,000	_	35,100,000	100,000	0%
Year 10	7,200,000	400,000	600,000	33,400,000	400,000	1%
Total	10,300,000	500,000	600,000	68,500,000	500,000	1%

Waste rock from West Genesis Phase II will be both potentially acid generating (PAG) and non-acid generating (non-PAG). Non-PAG waste rock from the West Genesis Phase II Pit will be placed in the existing Section 36 WRDF and the existing Section 5 WRDF. PAG waste rock from the West Genesis Phase II Pit will be placed in the existing Section 36 WRDF and the existing Section 5 WRDF.

No new haul roads will need to be developed for mining of the West Genesis Phase II Pit.

2.5.4 Bluestar Ridge Open Pit Mine (Bluestar Ridge)

Bluestar Ridge will be on both private and public land (Figure 4) with approximately eight acres on private land and 20 acres on public land. The construction and operation of the Bluestar Ridge Pit requires the incremental disturbance of 19 public acres and 7 private acres (Figure 5). It is likely that mining at Bluestar Ridge will occur periodically

throughout the life of the Genesis Project; it is shown years 11 and 12 to clarify the tonnages to be mined (**Table 4**). Newmont will use conventional open pit mining methods (truck and shovel), similar to those used in other pits. Bluestar Ridge will be a new open pit on native ground.

The Bluestar Ridge open pit mine will be approximately 1,300 feet in length, and 1,400 feet in width. A depth of 600 feet will be achieved down to the 5,340 feet AMSL elevation. This is approximately 73 feet above the pre-dewatering groundwater elevation. No dewatering will be required for the Bluestar Ridge operation.

The Bluestar Ridge Pit contains 4.4 million tons of ore and 9.0 million tons of waste rock. The mining production schedule summary is shown in **Table 6.**

Table 6: Bluestar Ridge Mineable Resource Development Schedule

Period (Years)	Oxide Leach Ore (Tons)	Oxide Mill Ore (Tons)	Refractory Mill Ore (Tons)	Total Waste Rock (Tons)	PAG Waste Rock (Tons)	% PAG of Total Waste
Year 11	3,000,000	-	-	7,200,000	-	
Year 12	1,400,000	_	-	1,800,000		_
Total	4,400,000	_	-	9,000,000	-	-

Waste rock from the Bluestar Ridge Pit is expected to be non-acid producing. All the waste from Bluestar Ridge Pit will be placed in the Section 5 WRDF.

A new haul road will be constructed along the northwest portion of the Bluestar Ridge Pit in order to move waste rock and ore. This road will have a running width of approximately 100-120 feet and an approximate length of 2,400 feet.

2.6 PROCESS AND FACILITIES

The majority of the ore coming from the Genesis Project will be oxide leach, both crushed and run-of-mine. There is some oxide and refractory mill material which will be processed at Newmont's Mills 5 and 6 in the South Area. Oxide mill material will be processed at Newmont's Mill 5, refractory mill material will be processed at Newmont's Mill 6, both are located in the South Area Operations approximately 6 miles north of Carlin, Nevada. This ore will be transported down the North/South Haul Road by Newmont haul trucks or will travel in highway ore trucks along State Route 766 through Newmont's South Area gate.

If low grade refractory ore is encountered during the mining of the Genesis Project, it will be temporarily stockpiled in the existing Section 3 stockpile area for future processing at Newmont's Mill 6.

2.7 WASTE ROCK DISPOSAL FACILITIES

Newmont proposes to place waste rock materials from the Genesis Project into the following waste rock disposal facilities:

- Beast Pit WRDF;
- Bluestar Pit WRDF;
- Genesis Pit WRDF;
- Section 36 WRDF;
- Section 5 WRDF; and
- West Genesis Pit WRDF

All WRDF's have been designed for easy reclamation and to prevent acid drainage from potentially acid generating (PAG) material. They will be constructed in lifts that facilitate reclaiming the surface to an overall 3 to 1 slope which blends well with existing topography. Designs of the WRDF's were developed using a 1.8 static factor of safety and a 1.2 pseudo-static factor of safety. Individual stability analysis for each WRDF will be included in subsequent sections.

Newmont will sample, test and classify the waste rock in accordance with the Nevada Division of Environmental Protection (NDEP) Waste Rock Overburden Evaluation guidelines to determine the acid generating potential of the mined waste rock. Net Carbonate Value (NCV) is used to determine acid generating potential. Any material with an NCV greater than zero is considered Non-PAG material. PAG waste rock, with an NCV less than zero, will be segregated, encapsulated and monitored in accordance with the Refractory Stockpile and Waste Rock Dump Design, Construction, and Monitoring Plan (January 2003). This plan defines procedures designed to minimize the potential for acid drainage by the control of the acid generation process. This process occurs when sulfide minerals react with oxygen and water to form sulfuric acid. Procedures to minimize the potential for acid drainage include:

- 1. Segregation and placement of sulfide waste rock in internal areas of WRDFs above a prepared base, or;
- 2. Segregation and placement of sulfide waste rock on limestone benches within areas of active backfill, and;
- 3. Total enclosure or encapsulation of the sulfide waste rock zone with non-acid producing material.
- 4. Careful sloping and random wheel compaction of individual lift surfaces.
- 5. Control of surface water flows to prevent infiltration.
- 6. Placement of a low permeability cap over the final encapsulation cell.
- 7. Reclamation of the WRDF, including establishing vegetation, to minimize water infiltration.

Several PAG cells have been designed within the above listed WRDFs. The proposed cells are listed below.

Table 7: Waste Rock Disposal Facility PAG Cell Locations

PAG Cells	Height	Length	Width	Capacity
	(ft)	(ft)	(ft)	(tons)
Section 36 WRDF PAG Cell	100	1,200	1,100	2,200,000
Section 5 WRDF PAG Cell	120	1,300	1,600	2,300,000
Beast Pit WRDF PAG 1 Cell	100	700	400	800,000
Beast Pit WRDF PAG 2 Cell	120	1,300	900	3,000,000
Genesis Pit WRDF PAG 1 Cell	100	2,000	800	6,800,000
Genesis Pit WRDF PAG 2 Cell	140	1,100	2,000	11,000,000
West Genesis Pit WRDF PAG Cell	80	500	900	1,700,000

2.7.1 Beast Pit WRDF

The Beast Pit WRDF will be on both private and public land (**Figure 4**) with approximately 42 acres on private land and 154 acres on public land. The construction and operation of the Beast Pit WRDF requires the incremental disturbance of 1 public acre and no additional private acres (**Figure 5**). The Beast Pit WRDF will have the capacity to store approximately 95.4 million tons of PAG and non-PAG waste rock (**Table 8**). This in-pit WRDF will be constructed by end-dumping from haul trucks.

The bottom elevation of the Beast Pit WRDF is 5,540 feet AMSL, and the maximum crest elevation will be approximately 6,260 feet AMSL. The Beast Pit will completely fill the existing Beast Pit to an elevation of 5,920 feet AMSL. Total fill will be approximately 720 feet deep at the deepest point, and approximately 340 feet will sit above the filled depression (**Figure 6**).

The Beast Pit WRDF will contain two PAG Cells: Beast PAG Cell 1 and Beast PAG Cell 2. Beast PAG Cell 1 will store approximately 0.8 million tons of PAG waste rock from the Genesis Pit and is located 463 feet above the pre-dewatering groundwater table at an elevation of 5,730 feet AMSL. Beast PAG Cell 1 is approximately 700 feet long and 400 feet wide, and is approximately 100 feet deep. This PAG cell will be constructed on Roberts Mountain limestone host rock benches of the previously mined Sold pit. It will have a maximum of 25 acres of exposed PAG for the duration of operation.

Beast PAG Cell 2 will store approximately 3.0 million tons of PAG from the Genesis pit and is located 763 feet above the pre-dewatering water table at an elevation of 6,030 feet AMSL. Beast PAG Cell 2 will be approximately 1,300 feet long and 900 feet wide, and have a height of 120 feet. This PAG cell will be constructed on both non-PAG waste rock, as well as native Roberts Mountain limestone hosted benches. This cell will also have a maximum exposed surface area of 25 acres throughout the operation.

Table 8: Beast Pit Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
Genesis	95,400,000	3,800,000	91,600,000	4%
Total	95,400,000	3,800,000	91,600,000	4%

2.7.2 Bluestar Pit WRDF

The Bluestar Pit WRDF will be on both private and public land (**Figure 4**) with approximately 172 acres on private land and 15 acres on public land. The construction and operation of the Bluestar Pit WRDF requires the incremental disturbance of 4 public acres and 4 private acres (**Figure 5**).

The Bluestar in-pit WRDF will have the capacity to store approximately 46.5 million tons of non-PAG waste rock (**Table 9**). This in-pit WRDF will be constructed by end-dumping from haul trucks. The bottom elevation of the Bluestar Pit WRDF is 5,320 feet AMSL, and the crest elevation will be approximately 6,120 feet AMSL and will completely fill the Bluestar pit up to the 5,680 feet AMSL elevation. The fill will be approximately 800 feet deep at the deepest point, and will rise 440 feet above the leveled off depression at the 5,680 feet elevation (**Figure 6**).

No PAG material will be placed in the Bluestar pit WRDF.

Table 9: Bluestar Pit Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
Genesis	33,500,000	-	33,500,000	
West Genesis I	13,000,000	_	13,000,000	-
TOTAL	46,500,000	-	46,500,000	-

2.7.3 Section 36 WRDF

The proposal for the Section 36 WRDF is to increase the ultimate height, and construct the facility to its previously permitted footprint. The facility is on public land (**Figure 4**) and covers approximately 287 acres of the approved 330 acres (BLM 1995).

The Section 36 WRDF vertical expansion will remain within the previously approved footprint (BLM 1995) and have the capacity to store approximately 54 million tons of PAG and non-PAG waste rock (**Table 10**). The current approved dimensions of the Section 36 WRDF are 4,800 feet in length and 4,200 feet in width, with an average depth of 220 feet.

This WRDF will be raised a maximum of approximately 260 feet above the permitted height by end-dumping from haul trucks. The average height increase over the

previously permitted Section 36 is 100 feet. The toe elevation will remain approximately 5460 feet AMSL, and the proposed crest elevation will be approximately 5940 feet AMSL for a total height of approximately 480 feet, and an average height of 320 feet (**Figure 6**).

The vertical expansion of the Section 36 WRDF will contain one PAG Cell. This PAG cell (Section 36 PAG Cell) will store approximately 2.2 million tons of PAG waste rock from the West Genesis Phase I and West Genesis Phase II Pits. This cell will be located above the currently constructed clay base which was built in compliance with the 1995 Refractory Ore Stockpile and Waste Rock Dump Design, Construction and Monitoring Guidelines. The cell will be placed above carbonate rich waste rock, and will be completely encased by non-PAG material. This cell will be approximately 1,200 feet in length and 1,100 feet in width, and a depth of 100 feet. It has a designed capacity of 3.1 million tons, although only 2.2 million tons of PAG are anticipated for this WRDF. The floor elevation will be approximately 5,630 feet AMSL, 363 feet above the predewatering groundwater elevation of 5,267 feet AMSL.

Table 10: Section 36 Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
West Genesis I	33,800,000	2,100,000	31,700,000	6%
West Genesis II	20,200,000	100,000	20,100,000	0%
TOTAL	54,000,000	2,200,000	51,800,000	4%

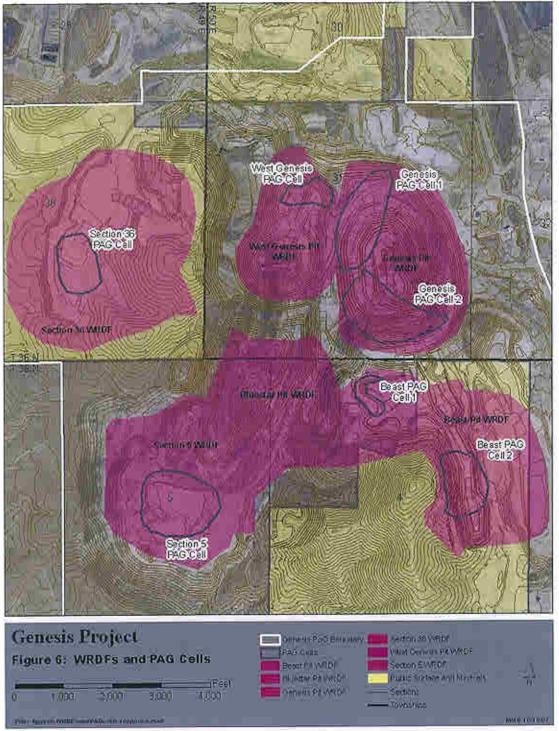


Figure 6: Genesis Project WRDFs and PAG Cells

2.7.4 Section 5 WRDF

The Section 5 WRDF is on private land (**Figure 4**) and is approximately 187 acres. The construction and operation of the Section 5 WRDF requires no incremental disturbance. This facility was constructed prior to 2003 and in accordance with the 1995 <u>Refractory Ore Stockpile and Waste Rock Dump Design, Construction, and Monitoring Guidelines.</u>

The Section 5 WRDF previously permitted shape was 4,500 feet in length and 3,200 feet in width, with an average height of 220 feet.

The Section 5 WRDF vertical expansion will have the capacity to store approximately 41.0 million tons of PAG and non-PAG waste rock (**Table 11**). This WRDF will be raised approximately 160 feet above the permitted height by end-dumping from haul trucks. The toe elevation will remain approximately 5,580 feet AMSL, and the proposed crest elevation will be approximately 5,960 feet AMSL for a maximum height of approximately 380 feet (**Figure 6**). The overall length and width will not increase from the previous permitted boundary.

Table 11: Section 5 Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
Genesis	16,800,000	1,600,000	15,200,000	10%
West Genesis I	15,200,000	700,000	14,500,000	5%
Bluestar Ridge	9,000,000	-	9,000,000	0%
TOTAL	41,000,000	2,300,000	38,700,000	6%

The Section 5 WRDF will contain one pre-existing PAG Cell. The Section 5 PAG Cell will store approximately 2.3 million tons of PAG waste rock from the Genesis and West Genesis Phase I pits. If any PAG is encountered in the Bluestar Ridge pit, it will also be stored in the Section 5 PAG cell, as the existing capacity of this PAG cell is 4.5 million tons.

This cell will be built upon the pre-existing PAG cell, over the clay base and will be encapsulated with carbonate rich waste rock. This cell is expected to by 1,300 feet long and 1,600 feet long, and will have a height of 120 feet. A maximum area of 25 acres of exposed PAG material will be kept throughout the life of this project.

The Section 5 PAG cell has a floor elevation of 5,670 feet AMSL, which is 403 feet above the pre-dewatering groundwater elevation of 5,267 feet AMSL.

2.7.5 Genesis Pit WRDF

The Genesis Pit WRDF will be located on private land (**Figure 4**) and will be approximately 207 acres. The construction and operation of the Genesis Pit WRDF requires no incremental disturbance (**Figure 5**).

The Genesis Pit WRDF will have the capacity to store approximately 164.2 million tons of PAG and non-PAG waste rock (**Table 12**). This in-pit WRDF will be constructed by end-dumping from haul trucks. The bottom elevation of the Genesis Pit WRDF is 4,640 feet AMSL, and the crest elevation will be approximately 5,700 feet AMSL and will fill the bottom 1,060 feet of the Genesis Pit (**Figure 6**).

The Genesis Pit WRDF will contain two PAG Cells: the Genesis PAG Cell 1 and the Genesis PAG Cell 2. The Genesis PAG Cell 1 will store approximately 6.8 million tons of PAG waste rock from the West Genesis Phase I Pit. The lowest elevation of this cell is approximately 13 feet above the pre-dewatering water table of approximately 5,267 feet AMSL. PAG Cell 1 will be approximately 2,000 feet long and 800 feet wide, and 100 feet in height. It will be built upon carbonate rich waste rock, as well as the native Vinini formation host rock.

The Genesis PAG Cell 2 will store approximately 11.0 million tons of PAG waste rock from the West Genesis Phase I Pit, although designed capacity of this cell is 13.0 million tons. PAG Cell 2 is located approximately 153 feet above the pre-dewatering water table. This PAG cell will be approximately 1,100 feet in length, 2,000 feet in width, and a height of 140 feet. This cell will also be built upon carbonate rich waste rock, as well as native Popavich formation host rock.

Both PAG cells will be completely encapsulated by carbonate rock. PAG Cell 1 will have a 10 foot minimum oxide waste rock encapsulation, while PAG cell 2 will also have a minimum covering of 10 feet.

Table 12: Genesis Pit Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
West Genesis I	164,200,000	1,600,000	146,400,000	9.5%
TOTAL	164,200,000	700,000	146,400,000	4.6%

2.7.6 West Genesis Pit WRDF

The West Genesis Pit WRDF will be private land (Figure 4) and is approximately 111 acres. The construction and operation of the West Genesis Pit WRDF requires no incremental disturbance (Figure 5).

The West Genesis in-pit WRDF will have the capacity to store approximately 49.4 million tons of PAG and non-PAG waste rock (**Table 13**). This in-pit WRDF will be constructed by end-dumping from haul trucks. The bottom elevation of the West Genesis Pit WRDF is 4,820 feet AMSL, and the crest elevation will be approximately 5,300 feet AMSL and will fill the bottom 480 feet of the West Genesis Pit (**Figure 6**).

The West Genesis Pit WRDF will contain one PAG Cell. The West Genesis Pit PAG Cell will store approximately 1.7 million tons of PAG waste rock from the West Genesis

Phase II Pit and is located approximately at the 5,280 feet elevation, 13 feet above the pre-dewatering water table. The PAG cell is planned to be 500 feet long and 900 feet wide, with an overall height of 80 feet. This cell will be placed against Popavich formation host rock in the northern portion of the West Genesis Pit WRDF, and will be completely encased by a minimum of 10 feet of non-PAG material from the West Genesis II pit.

Table 13: West Genesis Pit Waste Rock Disposal Facility

Pit	Total Waste (Tons)	PAG Waste (Tons)	Non-PAG Waste (Tons)	% PAG of Total Waste
West Genesis II	49,400,000	1,700,000	47,700,000	3.4%
TOTAL	49,400,000	1,700,000	47,700,000	3.4%

2.8 WASTE ROCK CHARACTERIZATION

2.8.1 Analytical Approach

Newmont has completed waste rock characterization on 34 composites which were developed from 533 samples, taken from 81 separate drill holes, and represent the full range of lithologies and mineralization to be mined from the pit shell based on logs and assayed parameters, including sulfide sulfur and carbonate carbon content. Sample length varied from 1.5 feet to 6 feet in length, and represents a total of 2,600.5 feet of drilling. Six waste rock types were defined based on these composites.

- 1. Oxide Siliceous siliciclastic rocks of the Vinini formation and Rodeo Creek unit, and includes the small volume of various intrusive rocks. These rocks have less than 0.20% sulfide sulfur, as indicated by LECO assays.
- 2. Unoxidized Siliceous siliciclastic rocks of the Vinini formation and Rodeo Creek unit, and includes the small volume of various intrusive rocks. These rocks have 0.20% and greater sulfide sulfur, as indicated by LECO assays.
- 3. Oxide Carbonate carbonate rocks from the Popovich and Roberts Mountains formation. These rocks have 0.50% carbonate carbon or more and less than 0.20% sulfide sulfur, as indicated by LECO assays.
- 4. Oxide Carbonate Decalcified carbonate rocks from the Popovich and Roberts Mountains formation. These rocks have less than 0.50% carbonate carbon and 0.20% or more of sulfide sulfur, as indicated by LECO assays.
- 5. Unoxidized Carbonate carbonate rocks from the Popovich and Roberts Mountains formation. These rocks have greater than 0.50% carbonate carbon and 0.20% or more sulfide sulfur, as indicated by LECO assays.
- 6. Unoxidized Carbonate Decalcified carbonate rocks from the Popovich and Roberts Mountains formation. These rocks have less than 0.50% carbonate carbon and 0.20% or more sulfide sulfur, as indicated by LECO assays.

Net Carbonate Value (NCV) is defined by the sum of the Acid Neutralizing Potential (ANP) and the Acid Generating Potential (AGP), or NCV = ANP + AGP. ANP is

calculated by the following figure: 3.67 * Carbonate Carbon (CC), while AGP can be calculated as -1.37 * Sulfide Sulfur (SS). The raw NCV data is attached as **Appendix 1**.

These six waste rock types were further segregated into six NCV ranges:

- 1. Acidic (NCV less than -1.0)
- 2. Slightly Acidic (NCV between -1.0 and -0.1)
- 3. Inert or Neutral (NCV between -0.1 and 0.1)
- 4. Slightly Basic (NCV between 0.1 and 1.0)
- 5. Basic (NCV between 1.0 and 5.0)
- 6. Highly Basic (NCV is greater than 5.0)

The 34 composites represent all possible combinations of the six waste rock types combined with the NCV classifications present within the pit shells.

2.8.2 Laboratory Analyses

Meteoric Water Mobility Procedure (MWMP) testing for the 34 composites is supplemented by petrographic examinations, semi quantitative X Ray Diffraction and X Ray Fluorescence (XRD-XRF), and multi-element Inductively Coupled Plasma (ICP) analyses. Additional test work includes; Biological Acid Production Potential, Modified Acid Base Accounting, and Peroxide Acid Generation Testing. Humidity Cell and Field Oxidation tests were also conducted on select composites.

Copies of the MWMP laboratory data are attached in Appendix 2.

2.8.3 Genesis Pit Rock Characterization

Mineralization in the Genesis pit is typical of low-grade disseminated deposits on the Carlin Trend. The major host rocks are lower-plate carbonate rocks. These are typically decalcified and weakly silicified. Highest grades are preferentially hosted in the Roberts Mountains Formation (SDrm2). Other host rocks include contact metamorphosed calc-silicate rocks, Rodeo Creek unit siliceous mudstone, siltstone and calcarenite, and even Vinini Formation mudstone/quartz hornfels and fractured Goldstrike intrusive margins. The gold deposits generally occur where mineralizing solutions exploited conjugate northwest and northeast-striking normal faults and anticline hinge zones. This is exemplified by the mill-grade core (> 0.050 oz/st Au) of the Genesis main orebody, located at the intersection of the NE striking K-dike with the NNW-trending Tuscarora anticline and the footwall of the Gen fault.

A total of 3,904 samples were tested for Net Carbonate Value (NCV) in the six material classification encountered in the Genesis pit. A block model was then created from these samples, using geostatistics to spatially coordinate those values to the formations within the deposit. The raw sample data collected is included as **Appendix 1**.

The average NCV of waste rock comprised in these samples was 4.26, which indicates the waste material is basic and acid neutralizing. Of these samples, 1,116 or 28% had

NCV values less than zero. 68% or 759 of these samples were from the ore bearing siliceous or carbonate material. **Table 14** shows a summary of the material types and tons for the Genesis pit waste rock, along with the average NCV for each material. The summary line shows a total of all waste rock tons, as well as the total number of samples, while the reported NCV figure is a ton-weighted average of NCV for the entire waste rock amount. **Figure 7** displays a histogram of the NCV sample frequency.

Table 14: Genesis Pit NCV by Material Type

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Material	Waste Rock (Tons)	Average NCV	Number of Samples
Oxidized Carbonate	43,000,000	12.93	347
Oxidized Carbonate Decalcified	42,600,000	0.49	729
Oxidized Siliceous	46,400,000	0.63	1,570
Unoxidized Carbonate	1,600,000	10.39	73
Unoxidized Carbonate Decalcified	5,800,000	-0.78	315
Unoxidized Siliceous	6,300,000	0.46	870
Summary	145,700,000	4.26	3,904

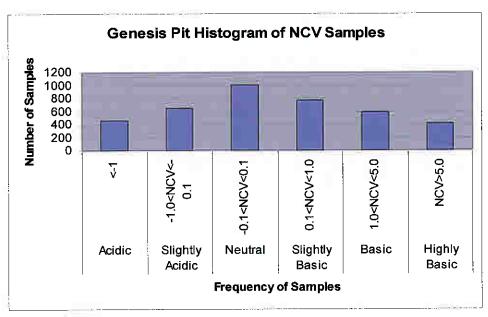


Figure 7: Histogram of NCV Samples – Genesis Pit

The average NCV of non-PAG material is 4.47, which can be calculated by removing the negative NCV grouping from Table 14 (unoxidized carbonate decalcified). This non-PAG material will be placed in the Bluestar WRDF, Beast WRDF, and the Section 5 WRDF.

2.8.4 West Genesis Pit Rock Characterization (Phase I & II)

Mineralization in the West Genesis pits is also typical of low-grade disseminated deposits on the Carlin Trend. Ore grade gold is hosted in two different zones. The first zone is higher in the section within the siliciclastic Rodeo Creek unit. Rodeo Creek mineralization is generally bedding controlled with a secondary structural control, and is dominated by leach grades (<0.050 oz/st Au). The second zone of mineralization is chiefly controlled by low-angle faulting, and crosses from the carbonate rocks (Roberts Mountains Formation and Popovich Formation) up into the siliciclastic Rodeo Creek. Mineralizing fluids in this zone were less likely to move into the stratigraphy of the low permeable calc-silicate rocks, so mineralization tends to be mill-grade (>0.050 oz/st Au). Grades are generally higher were the low-angle faulting is intersected by several different NNW tending high-angle faults.

A total of 8,955 samples were tested for Net Carbonate Value in the six material types encountered within the West Genesis pits. A block model was then created from these samples, using geostatistics to spatially coordinate those values to the formations within the deposit. The raw sample data collected is included as **Appendix 1**.

The average NCV of the samples was 3.31, which indicates the material is basic and acid neutralizing. 22% of the samples taken had a NCV value below zero, of which 67% or 1,278 of the samples were from the ore-bearing siliceous and carbonate material. **Table 15** shows a summary of the NCV values and tonnages, along with a summary, which gives the total number of waste rock tons, total number of samples, and the ton-weighted average NCV value of all waste rock. **Figure 8** displays a histogram of the NCV sample frequency.

Table 15: West Genesis Pit (Phase I & II): NCV by Material Type

Material	Waste Rock (Tons)	Avg NCV	Number of Samples
Oxidized Carbonate	66,700,000	10.44	2,276
Oxidized Carbonate Decalcified	101,800,000	0.72	562
Oxidized Siliceous	76,100,000	0.60	3,446
Unoxidized Carbonate	17,600,000	10.30	763
Unoxidized Carbonate Decalcified	17,900,000	-0.90	606
Unoxidized Siliceous	14,800,000	-0.34	1,302
Summary	294,900,000	3.31	8,955

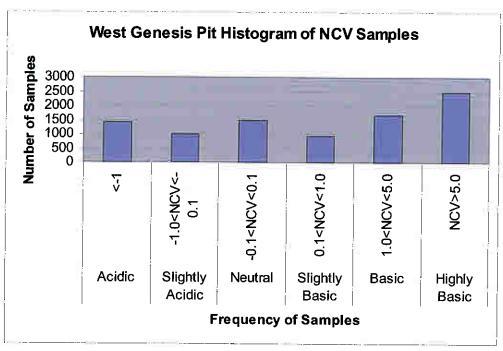


Figure 8: Histogram of NCV Samples - West Genesis Pit

The average NCV of non-PAG material is 3.80, which can be calculated by removing the negative NCV groupings from Table 14 (Unoxidized Carbonate Decalcified and Unoxidized Siliceous). This acid neutralizing waste rock will be placed in the Genesis pit WRDF, Bluestar WRDF, Section 5 WRDF, and the Section 36 WRDF.

2.9 WATER MANAGEMENT

2.9.1 Dewatering

Two of the pits, Genesis and West Genesis Phase I, will extend below the pre-dewatering water table, however only Genesis will require dewatering. The Genesis pit west of the Gen Fault and the entire West Genesis Phase I pit are within the cone of depression from dewatering activities at Barrick's nearby Betze-Post mine and Newmont's Leeville Mine. The east wall of the Genesis pit east of the Gen Fault will require a small amount of dewatering prior to mining. Pumping wells augmented by vertical, angle, and horizontal drains will be used to reduce pore pressures within the east highwall. Water produced from pumping will be supplied to Newmont's North Area Leach operations, Barrick's processing facilities, and to the Deep Post/Deep Star underground mining operation.

In a broad sense, the Genesis Project can be divided into two hydrogeologic domains separated by the Gen Fault (Figure 9):

 A western domain dominated by lower plate carbonate units with high transmissivities. This sector of the mine (Genesis Pit west of the Gen Fault and

- the entire West Genesis Phase I pit) is in hydraulic connection with the dewatering systems at both Betze-Post and Leeville.
- An eastern domain dominated by upper plate clay-rich mudstone and hornfels. The clays inhibit free movement of water within these units, thereby preventing complete drainage. Water is compartmentalized, with variable water levels, in this domain.

Two of the pits will extend below the pre-dewatering lower plate water table (5267 elevation): Genesis ultimate is 4,620 elevation, and West Genesis Phase I ultimate is 4,800 elevation. Only the east wall of the Genesis Pit east of the Gen Fault will require a small amount of dewatering prior to mining; pre-dewatering water levels generally ranged from 5,600 to 5,400 elevation in east wall upper plate rocks. No additional dewatering is required to mine West Genesis, as that area has already been dewatered below the lowest pit elevation.

In the past, a combination of pumping wells and drains was used to dewater the eastern domain. These efforts were effective at mitigating potential slope-stability issues that would have resulted from high pore pressures within the pitwall, and a similar strategy is planned for the next phase of mining in Genesis Pit.

Vertical, angle, and horizontal drains augmented by pumping wells will be used to reduce pore pressures within the east highwall. Water produced from pumping will be supplied to Newmont's North Area Leach operations, Barrick's processing facilities, and to the Deep Post/Deep Star underground mining operation. Drains move water from compartments in the east highwall to currently dewatered carbonate units in the footwall of the Gen Fault.

2.9.1.1 Dewatering Rates

During the period 1994 to 2003, active dewatering at Genesis averaged 223 gpm; the highest pumping rate was 565 gpm, and the lowest was 19 gpm. Mining in Genesis Pit was completed in 1998, and pumping rates gradually declined until pumping stopped in late 2003. It is expected that dewatering rates up to 1,000 gpm will be required to allow the east highwall at Genesis to be safely laid back. Renewed dewatering is only necessary to mine Genesis Pit; expected average annual production from drains and wells will be about 250 gallons per minute, or 130 million gallons per year. Over eight years of active dewatering an estimated 1.1 billion gallons will have to be removed. Active dewatering will end synchronously with mining in Genesis Pit.

2.9.1.2 Dewatering Methods

The goal of dewatering at Genesis is to allow for design of a safe, economic highwall on the east side of the pit. Genesis dewatering is designed to reduce pore pressures over a zone extending approximately 100 to 150 feet outward from the planned crest. The Vinini Formation, which is the primary unit exposed in the east wall, is notable for its lack of permeability and compartmentalization. Therefore, multiple methods are required to satisfactorily dewater the east highwall at Genesis:

- 1. Drains (vertical, angle, and horizontal) will be drilled/constructed to allow compartmentalized water to drain into carbonate rocks that are already dewatered (west of the Gen Fault).
- 2. New pumping wells will be constructed east of the ultimate pit crest, primarily on Newmont fee land in section 31 and possibly the west half of section 32. These wells will be 8 to 14 inch diameter, and will generally be 800 to 1,000 feet deep.

A vertical or angle drain is a borehole, typically 5.5 to 6.5" diameter, drilled to provide hydraulic communication between compartmentalized/perched water and rock units that are in hydraulic continuity with pumping wells. When drains are drilled vertically or at steep angles, they are drilled across hydrogeologic boundaries until static water level descends. These drains are usually filled with gravel to prevent blinding due to borehole caving or swelling clays. **Figure 9** provides a schematic representation of the vertical/angle drain concept.

Horizontal drains are drilled somewhat beyond the point at which groundwater is produced in reasonable volume. Horizontal drains are generally constructed with slotted casing, and are sealed at the surface so that the water produced can be directed to hoses or pipes for collection and disposal.

Drains are less productive than pumping wells, due to the relatively small borehole diameter and lack of well development. However, they require no maintenance, and are readily mined-through with minimal adverse impact to functionality.

Currently-known static water levels in the east highwall range from 5,560 to 5,050 elevation. The variability in static water levels is indicative of the high degree of compartmentalization of water in the Genesis east highwall. The relative inability of water to readily cross the structures that produce hydrogeologic compartments results in significant dewatering challenges. Initial dewatering will focus on drains, with pumping wells installed in compartments that cannot be readily drained.

Dewatering of the east wall is planned in stages. The first stage comprises construction of six or seven drains, and one pumping well. The drains will be allowed to function for one to three months, depending on the information obtained from monitoring. The pumping well will then be commissioned and monitored. Data obtained from the initial drains and first well should assist in further definition of hydrogeologic compartments. This information will direct the next stage of dewatering, which will most likely involve additional drain and well construction.

Currently up to 35 drains and possibly ten wells may be required to satisfactorily reduce pore pressures in the Genesis east highwall. These totals will be modified as dewatering experience is gained.

2.9.1.3 Disposal of Water

Water produced from wells will be pumped *via* new pipelines (primarily on surface, but some may be buried) to the existing Two Million Gallon Pond. From there, water will be distributed through existing buried pipelines to Newmont's North Area Leach operations and Deep Post/Deep Star underground mines for use in process and mining. Additionally, water can be sent to Barrick Goldstrike for use in process *via* an existing ten inch buried pipeline. All pipelines are or will be located on Newmont and Barrick fee lands. Water produced *via* drains will infiltrate into permeable, dewatered carbonate rocks beneath the pit.

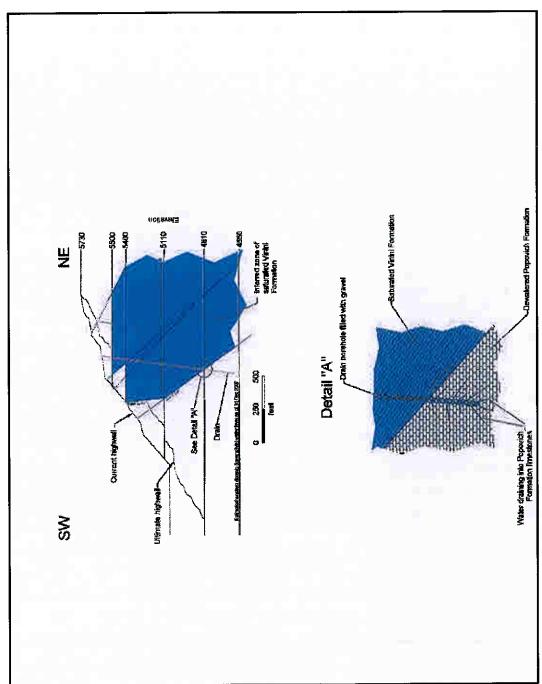


Figure 9: Genesis Cross-Section. This cross section through the northeast portion of the Genesis Pit, shows geologic structure, compartmentalized water, and a typical drain.

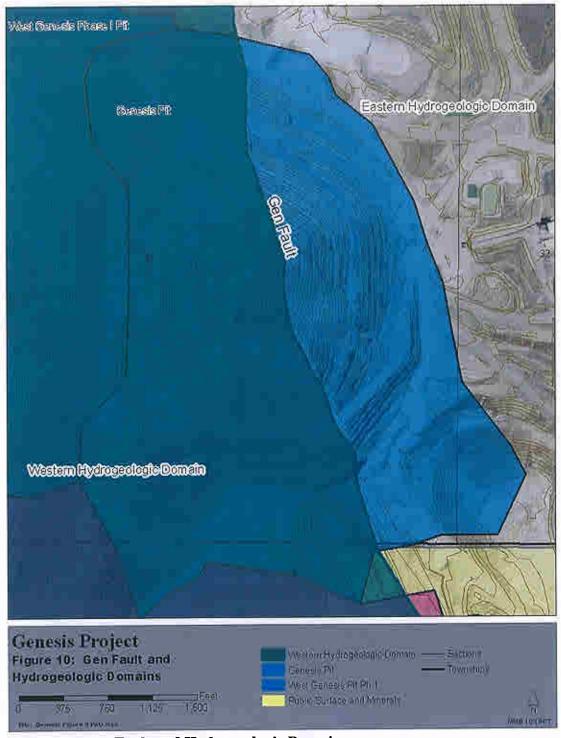


Figure 10: Gen Fault and Hydrogeologic Domains

2.10 HAUL AND ACCESS ROADS

2.10.1 Bluestar Ridge Haul and Access Road

The Bluestar Ridge Haul and Access Road will be located on both public and private land (**Figure 4**) with approximately 18 acres on private land and one acre on public land. The construction and operation of the Bluestar Ridge Haul and Access Road requires the incremental disturbance of 8 private acres and no additional public acres (**Figure 5**).

The Bluestar Ridge Haul and Access Road will be constructed along the northwest portion of the Bluestar Ridge Pit in order to move waste rock and ore. This road will have a running width of approximately 100-120 feet and an approximate length of 2,400 feet

2.10.2 Section 36 Haul and Access Road

The Section 36 Haul and Access Road will be located on both public and private land (**Figure 4**) with approximately five acres on private land and 17 acres on public land. The construction and operation of the Section 36 Haul and Access Road requires no incremental acreage disturbance (**Figure 5**).

The Section 36 Haul and Access Road will be constructed along the northeast and southeast portion of the Section 36 WRDF in order to move waste rock and ore. This road will have a running width of approximately 100-120 feet and an approximate length of 2,700 feet.

3.0 ENVIRONMENTAL PROTECTION MEASURES

Federal and State regulations require environmental monitoring of a facility to ensure that the environment is not degraded as a result of mining operations. This section discusses environmental controls.

3.1 AIR QUALITY

The generation of fugitive dust from mining, including such activities as drilling, blasting, excavating, loading, hauling and waste rock disposal, is controlled by Best management Practices (Handbook of Best management Practices, Nevada State Conservation Commission, 1994). Examples include direct water application, the use of approved chemical binders or wetting agents, and revegetation of disturbed areas concurrent with operations.

3.2 CULTURAL

The Genesis Project has been surveyed for cultural resources and there will be no impacts from the proposed action.

3.3 WILDLIFE AND LIVESTOCK

If necessary, fencing will be constructed and maintained in order to keep livestock out of the Genesis Project area.

3.4 NOXIOUS WEEDS

Annual weed surveys are conducted in order to direct weed control efforts. Monitoring infestations and weed control efforts continue until reclamation is complete in order to minimize the potential for weed invasion. This weed control effort is continued for the life-of-mine and reclamation period in order to reduce the number of new infestations. If straw bales are used for sediment control, certified weed free straw bales will be used.

3.5 WATER RESOURCES

Surface water control ditches will be constructed, where necessary, around open pit mines and waste rock disposal facilities. These ditches control meteoric water run-on and run-off. Sediment control structures may include, but are not limited to, installation of silt traps and fences, sediment ponds and settling basins. Silt traps or fences could include utilizing straw, hay bales, or synthetic materials such as geotextile fabrics. Newmont would maintain these structures until reclamation is completed.

Storm water discharge control measures include preventative maintenance, visual inspections and monitoring, materials handling practices that minimize exposure of

pollutants to storm water, spill prevention and response techniques, sediment and erosion control procedures, and physical storm water controls.

3.6 HAZARDOUS MATERIALS

The term "hazardous materials" is defined in 49 CFR 172.101. Hazardous substances are defined in 49 CFR 302.4 and the Superfund Amendments and Reauthorization Act (SARA) Title III. Hazardous materials will be transported to the Genesis Project by U.S. Department of Transportation (DOT) regulated transporters and stored on-site in DOT approved containers. Spill containment structures will be provided for the storage containers. Hazardous materials would be stored in designated areas on private and public land.

3.7 HAZARDOUS WASTE

Hazardous waste generation, treatment and disposal are regulated by the Federal Resource Conservation and Recovery Act (RCRA), 40 CFR, 260-270. Under RCRA, Lantern 3, by itself, is considered a "conditionally exempt small quantity generator," because less than 100 kilograms of hazardous waste will be generated each month. However, the Project is part of Newmont's North Area which is a large quantity generator. As such, all of the necessary facilities and infrastructure for large quantity generators are in place in the North Area.

Newmont has a waste minimization program to evaluate hazardous substances used on the mine property. When possible, alternative products that generate no waste or solid waste, rather than RCRA will be used. Hazardous wastes generated at the Project will be transported to permitted waste disposal facilities by licensed waste haulers. When practical, the wastes will be sent to recycling facilities.

3.8 CLOSURE AND RECLAMATION

As various facilities, including the mine pits, waste rock disposal areas, leach pads and ancillary facilities, reach the end of their useful lives, Newmont will institute appropriate closure measures for these facilities. In compliance with BLM and NDEP regulations Newmont will file a reclamation plan with this Plan of Operations that encompasses disturbances associated with the Project. The reclamation plan will use state of the art reclamation techniques that will result in the establishment of productive and self-sustaining biologically diverse ecological systems. Reclamation is also designed to result in the restoration of an aesthetically pleasing viewshed which will be compatible with the natural setting and achieve the principle land uses of wildlife habitat and livestock grazing. The reclamation techniques will provide effective control of erosion and sedimentation and provide stability under design storm flow conditions.

As is Newmont's standard operating practice, available topsoil resources will be recovered and stockpiled for future use in reclaiming disturbed areas. Topsoil recovery

depths will be determined during operations by qualified reclamation personnel. The topsoil stockpiles will be located to minimize disturbance by mining activities. Newmont will utilize all stockpiled topsoil to reclaim the facilities and disturbed areas at the appropriate time.

Where and when possible, Newmont will employ concurrent reclamation and closure practices that will commence at appropriate times when final limits of facilities are obtained.

3.9 HUMAN HEALTH AND SAFETY

Newmont's operations are subject to the Federal Mine Safety and Health Act of 1977 (MSHA), which sets forth mandatory safety and health standards for metal mines, including open pit mines. The purpose of the standards is the protection of life, promotion of health and safety, and prevention of accidents. Regulations issued under MSHA are codified under 30 CFR Subchapter N, Part 56. All Newmont employees are required to receive the training outlined in the following table.

3.10 EMPLOYMENT

Newmont employs 3,715 people in the northern Nevada area. The proposed action, together with other Newmont activities, would provide for long term operations in this area, with consequent potential for stable employment levels for approximately 12 years. The Genesis Project will not result in hiring new employees, but does help extend Newmont's mine-life and therefore extends the employment of current personnel.

4.0 REFERENCES

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